

# Gastrointestinal Tract Injury at Time of Elective Hysterectomy: A Retrospective Analysis

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## INTRODUCTION

GIT injury is a rare, but potentially life-threatening complication of hysterectomy. The prevalence of GIT injuries varies considerably in the literature given varying definitions and approaches to data collection. This retrospective cohort study evaluated the incidence of inadvertent GIT injury at time of elective hysterectomy over a four-year period across six hospitals in Western Sydney.

## METHOD

A retrospective review was undertaken of women who had undergone an elective hysterectomy for benign indications with our advanced laparoscopic pelvic surgical unit.

Data was obtained from electronic patient records. Information collected included baseline patient characteristics, mode of hysterectomy, possible peri-operative risk factors and intraoperative factors. Statistical analysis was then performed using SPSS® Statistics version 21.

## RESULTS

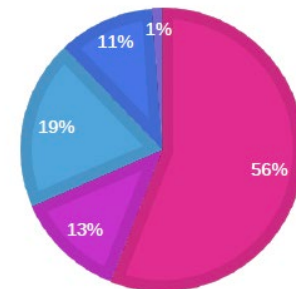
A total of 1492 women were included in this study. There was no significant difference in median age or BMI for women who sustained an inadvertent GIT injury compared to those who did not.

Most hysterectomies were performed using a laparoscopic approach (68%). There were eight (0.5%) identified cases of GIT injury with six cases associated with a laparoscopic approach and remaining two during abdominal approach.

The most common site of injury was the large bowel with a single stomach injury during palmers point entry. Repair of injury involved either primary closure or anterior resection.

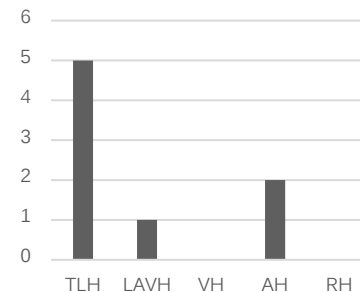
## RESULTS

Figure 1. Proportion of hysterectomies by mode of surgery



■ TLH ■ LAVH ■ VH ■ AH ■ RH

Figure 2. Number of injuries by mode of hysterectomy



## DISCUSSION

Most hysterectomies were laparoscopic, which is largely due to the unit's specialist interest in performing advanced laparoscopic surgery but also due to a general trend towards minimally invasive approaches. Our rate of inadvertent GIT injury is similar to rates seen in the wider literature although given the retrospective nature of our study, this may be under-estimated.

Seven out of eight patients with GIT injury had significant co-morbidities contributing to their surgical complexity including PID, previous pelvic surgery and advanced endometriosis.

Most injuries were identified and managed intra-operatively without conversion to an open procedure. This may be related to increasing surgical confidence in laparoscopic management of complications and the benefits of intra-operative colorectal surgical consultation.

## REFERENCES

- Lee, J., et al., 2014. Trends in the National Distribution of Laparoscopic Hysterectomies from 2003–2010. *Journal of Minimally Invasive Gynecology*, 21 (4), 656-661.
- Mäkinen, J., et al., 2013. Ten years of progress-improved hysterectomy outcomes in Finland 1996-2006: a longitudinal observation study. *BMJ Open*, 3 (10).
- Nieboer, T.E., et al., 2009. Surgical approach to hysterectomy for benign gynaecological disease. *The Cochrane Database of Systematic Review*, 8 (3).

## DISCUSSION

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## CONCLUSION

In evaluating the incidence of GIT injury within a single surgical unit we have obtained results that reflect the current standard of practice in our institute, which is comparable with current literature.

Our experience suggests that appropriate patient selection and intraoperative identification and management of GIT injuries is key to improving the associated surgical morbidity and mortality.

